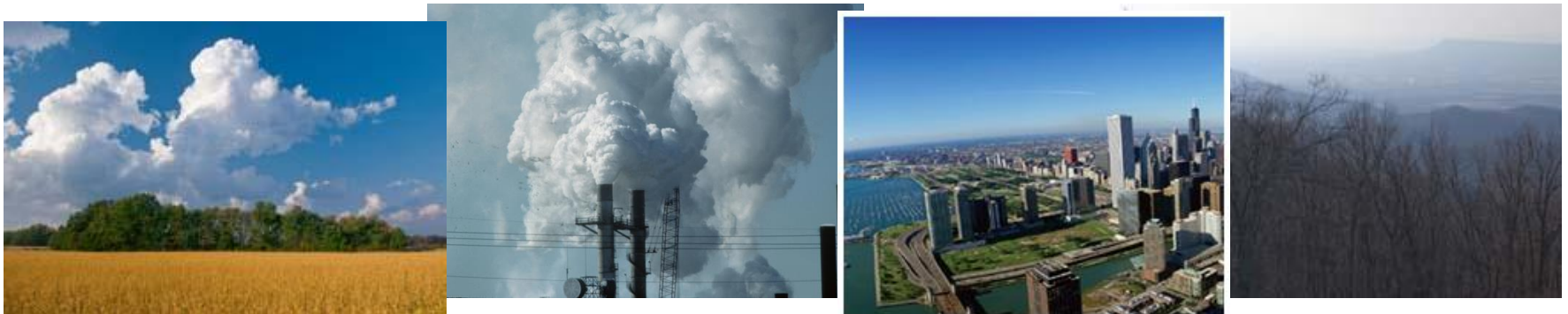


US EPA ARCHIVE DOCUMENT

NAAQS, SIP, Regional Haze Update

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**2014 Region 4 Modeler's Workshop
November 5, 2014**



Overview of Presentation

- NAAQS Updates
 - Ozone
 - PM_{2.5}
 - SO₂
 - Lead
- Regional Haze

NAAQS Reviews: Status Update

(as of October 10, 2014)

| | Ozone | Lead | Primary NO ₂ | Primary SO ₂ | Secondary NO ₂ and SO ₂ | PM | CO |
|---|---|--|---|-------------------------------------|---|--|-------------------------|
| Last Review Completed (final rule signed) | Mar 2008 | Oct 2008 | Jan 2010 | Jun 2010 | Mar 2012 | Dec 2012 | Aug 2011 |
| Recent or Upcoming Major Milestone(s) ¹ | <u>August 2014</u> Final REAs Final PA <u>Dec 1, 2014</u> ² Proposed rule <u>Oct 1, 2015</u> ² Final rule | <u>May 2014</u> Final PA <u>2014</u> Proposed rule | <u>June 2014</u> Final IRP <u>Fall 2014</u> 2 nd Draft ISA REA Planning Document | <u>Summer 2014</u> Final IRP | <u>Fall 2014</u> Draft IRP | Kickoff workshop for next review targeted for early 2015 | <u>TBD</u> ³ |

¹ IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment

² **Bold and underlined** dates indicate court-ordered or settlement agreement deadlines

³ TBD = to be determined



Anticipated NAAQS Implementation Milestones

(updated October 10, 2014)

| Pollutant | Final NAAQS Date | Infrastructure SIP Due | Designations Effective | Attainment Plans Due | Attainment Date |
|----------------------------------|------------------|------------------------|------------------------|----------------------|----------------------------------|
| PM _{2.5} (2006) | Oct 2006 | Oct 2009 | Dec 2009 | Dec 2014 | Dec 2015 (Mod) Dec 2019 (Ser) |
| Pb (2008) | Oct 2008 | Oct 2011 | Dec 2010-2011 | June 2012-2013 | Dec 2015-2016 |
| NO ₂ (2010) (primary) | Jan 2010 | Jan 2013 | Feb 2012 | N/A | N/A |
| SO ₂ (2010) (primary) | June 2010 | June 2013 | Oct 2013 (+2 rounds) | April 2015 | Oct 2018 |
| Ozone (2008) | Mar 2008 | Mar 2011 | July 2012 | Mid 2015-2016 | 2015-2032 |
| PM _{2.5} (2012) | Dec 2012 | Dec 2015 | Early 2015 | Mid 2016 | Dec 2021 (Mod) Dec 2025 (Ser) |
| Ozone (2015) | Oct 2015 | Oct 2018 | Dec 2017 | Dec 2020-21 | 2020-2037 |

Ozone

2008 Ozone NAAQS Implementation

- Revised primary 8-hour Ozone NAAQS in 2008 (75 ppb)
- Area designations for the 2008 Ozone NAAQS effective on July 20, 2012
 - 46 nonattainment areas, 1 unclassifiable area
 - Ongoing litigation concerning designations for several areas
 - Oral argument set for October 21, 2014
- EPA received two petitions seeking redesignation to nonattainment of newly violating areas initially designated as attainment or unclassifiable
 - On August 14, 2014, EPA denied the petition submitted by Sierra Club regarding the redesignation of 57 areas
- 2008 Ozone NAAQS SIP Requirements Rule and Revocation of 1997 NAAQS
 - Proposed May 29, 2013 (78 FR 34178), anticipate final rule in early 2015
 - Emission inventory, emissions statements SIPs due for all areas July 2014
 - RACT SIPs due July 2014 (moderate and above)
 - Attainment plans and demonstrations due July 2015 (Moderate) or July 2016 (Serious and above)

2015 Ozone NAAQS Review

- April 29, 2014, court issued ruling on schedule
 - Propose December 1, 2014
 - Final October 1, 2015
- Key implementation milestones for NAAQS (if revised)
 - I-SIPs due Oct 2018
 - Designations promulgated by October 2017
 - Attainment plans due 2020-21
 - Attainment dates 2020-2037 (primary standard only)
- Implementation rules and guidance for 2015 Ozone NAAQS
 - Seeking early input on certain implementation issues

Potential Schedule for 2015 Ozone NAAQS Implementation Rules/Guidance/Tools

| Action | After NAAQS Promulgation | Actual and (Planned) Dates |
|---|--------------------------|----------------------------|
| EPA <u>proposes</u> 2015 Ozone NAAQS and Monitoring, Exceptional Event Demonstration Schedule, and PSD guidance or rule as part of 2015 NAAQS proposal. | | December 2014 |
| EPA <u>finalizes</u> 2015 Ozone NAAQS and Monitoring, Exceptional Event Demonstration Schedule, and PSD guidance or rule as part of 2015 NAAQS final. | Upon promulgation | October 2015 |
| EPA issues Designations guidance | 4 months | January 2016 |
| <i>States submit Designation recommendations</i> | <i>12 months</i> | <i>October 2016</i> |
| As needed, EPA issues Transport Rule and/or revised i-SIP guidance | Up to 12 months | Up to October 2016 |
| EPA <u>proposes</u> Nonattainment Area SIP rules/guidance (including classification, conformity, emission inventory, modeling [e.g., Appendix W], and nonattainment NSR provisions) | 12 months | October 2016 |
| EPA <u>finalizes</u> Designations, Classifications, and Attainment Dates | 24 months | October 2017 |
| EPA <u>finalizes</u> Nonattainment Area SIP rules/guidance | 24 months | October 2017 |
| EPA issues final SIP templates, toolkits, etc. to assist states with development of nonattainment area plans | 24 months | October 2017 |
| <i>States submit Infrastructure and Transport SIPs</i> | <i>36 months</i> | <i>October 2018</i> |
| <i>States submit Attainment plans</i> | <i>5-6 years</i> | <i>December 2020-2021</i> |
| <i>Nonattainment Area Attainment Dates (Marginal – Extreme)</i> | <i>5-22 years</i> | <i>December 2020-2037</i> |

* Designations can be finalized in 3 years under certain circumstances. If an additional year is used for designations, then an additional year could be used to develop implementation guidance.

Fine Particulate Matter

Particulate Matter_{2.5} (PM_{2.5}) NAAQS

- On December 14, 2012, EPA revised the primary (health-based) annual PM_{2.5} standard by lowering the level from 15.0 to 12.0 $\mu\text{g}/\text{m}^3$
- U.S. Court of Appeals, D.C. Circuit issued its decision on May 9, 2014 regarding a lawsuit challenging the final PM NAAQS
 - Court denied petitions for review on all accounts



PM_{2.5} NAAQS Implementation: Status of Designations

- EPA received recommendations from 50 states, 2 territories, D.C. and 6 tribes
- On August 19, 2014, 120-day letters were signed and released indicating EPA's intent to designate:
 - Nonattainment - 14 areas in 6 states
 - Unclassifiable – 2 territory, 1 area in Indian country, 3 areas in Georgia, the entire state of Tennessee (except for 3 counties in the Chattanooga area), the entire state of Illinois, 2 counties in Indiana and 4 counties and 1 city in Missouri
 - Deferring designations for 1 year for five areas – primarily in Georgia but also affecting single counties in South Carolina and Alabama

PM_{2.5} NAAQS Implementation: Status of Designations (cont.)

- The Notice of Availability for the 120-day letters was published in the Federal Register on August 29, 2014 (78 FR 51517)
- The comment period on the 120-day letters closes:
 - September 29, 2014 for the public
 - October 29, 2014 for states and tribes
- Final designations expected in December 2014 for most areas

PM_{2.5} NAAQS Implementation: SIP Requirements NPRM

- PM_{2.5} NAAQS SIP Requirements NPRM

- Propose rule late 2014
- Finalize as close as possible to effective date of designations for the 2012 PM_{2.5} NAAQS (in late 2015)

- The proposal will:

- Take comment on approaches to clarify nonattainment implementation requirements according to subpart 4 of part D of Title I of the CAA, consistent with January 2013 D.C. Circuit Court decision
- Apply to all PM_{2.5} NAAQS nonattainment areas, including areas designated for the 1997 and 2006 PM_{2.5} NAAQS and areas designated later this year for the 2012 PM_{2.5} NAAQS
- Address how subpart 4 court decision affects nonattainment NSR permitting requirements (e.g., with respect to major source threshold, precursors, etc.)



PM_{2.5} NAAQS Implementation: 2014 Deadline and Classification Rule

- On June 2, 2014, EPA issued the final rule on “Identification of Nonattainment Classification and Deadlines for Submission of SIP Provisions for 1997 PM_{2.5} NAAQS and 2006 PM_{2.5} NAAQS” (79 FR 31566)
- Classifies areas designated nonattainment for the 1997 and/or 2006 PM_{2.5} standards as “Moderate”
- Sets new deadline of December 31, 2014, for states to submit attainment–related and nonattainment NSR SIP submissions required under subpart 4 as needed
- Provides clarity to states following January 2013 D.C. Circuit decision holding that the EPA should implement PM_{2.5} NAAQS according to subpart 4 of part D of Title I of the Clean Air Act
- Litigation pending



PM_{2.5} NAAQS Implementation: Inventory and Modeling Guidance

- PM_{2.5} Emissions Inventory Guidance
 - EPA is updating the 2005 Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter NAAQS and Regional Haze Regulations
 - Draft guidance will be released with the proposed PM_{2.5} Implementation Rule in late 2014
 - Final guidance will be released with the final PM_{2.5} Implementation Rule
- PM_{2.5} Attainment Demonstration Modeling Guidance for SIPs
 - Updates to draft guidance – Late 2014 around timing for designations
 - Final version will be released when PM_{2.5} Implementation Rule is finalized

Schedule for 2012 PM_{2.5} NAAQS Implementation Rules/Guidance/Tools

| Action | After NAAQS Promulgation | Actual and (Planned) Dates |
|---|--------------------------|----------------------------|
| EPA promulgates 2012 PM _{2.5} NAAQS rule and Monitoring, Exceptional Event Demonstration Schedule, and PSD guidance or rule as part of NAAQS rule. | N/A | Dec-12 |
| EPA issues Designations guidance | 4 months | Apr-13 |
| <i>States submit Designation recommendations as needed</i> | 12 months | Oct-13 - Mar-14 |
| EPA proposed nonattainment area SIP rules or guidance (e.g., modeling, emission inventory and permit modeling guidances) | 12 months | (Dec-14) |
| EPA finalizes PM _{2.5} area designations | 24 months | (Dec-14) |
| Effective date of EPA designations | 27 months* | (Apr-15) |
| EPA issues final nonattainment area SIP rules or guidance (e.g., modeling, emission inventory and permit modeling guidances) | 27 months* | (Sep-15) |
| EPA and/or air agencies issue final SIP templates, toolkits, etc. to assist states with development of nonattainment area plans | 27 months* | (Sep-15) |
| <i>States submit Attainment plans</i> | 45 months | (Sep-16) |

* Designations can be finalized in 3 years under certain circumstances. If an additional year is used for designations, then an additional year could be used to develop implementation guidance.

SULFUR DIOXIDE

2010 SO₂ NAAQS Implementation

- Revised primary SO₂ standard: June 2010 (75 ppb/1-hour)
- SO₂ Area Designations and Implementation Strategy released February 2013
- Designations and Implementation Guidance and Assistance
 - Issued PSD permit modeling guidance documents applicable to the 1-hour SO₂ NAAQS on August 23, 2010 and March 1, 2011
 - Technical Assistance Documents for modeling and monitoring issued December 2013

For more information including strategy and guidances visit

<http://www.epa.gov/airquality/sulfurdioxide/implement.html>

2010 SO₂ NAAQS Implementation

- SO₂ Data Requirements Rule
 - Objective is to provide information to EPA in an orderly fashion to inform initial area designations for areas not designated in 2013
 - Proposed on April 17, 2014
 - <https://www.federalregister.gov/articles/2014/05/13/2014-09458/data-requirements-rule-for-the-1-hour-sulfur-dioxide-so2>
 - Final scheduled for summer 2015 (or sooner)
- 1-hr SO₂ NAAQS Nonattainment SIP Elements Guidance
 - Objective is to provide assistance to areas developing their nonattainment area plans
 - Issued guidance on April 24, 2014
 - <http://www.epa.gov/airquality/sulfurdioxide/pdfs/20140423guidance.pdf>
 - EPA Regional Offices are working to assist states with SO₂ nonattainment areas in applying this guidance to develop SIPs, redesignation areas, etc.

2010 SO₂ NAAQS Implementation: Designations

- SO₂ Designations and Implementation Strategy provides for three rounds of designations:
 - First round of designations
 - Promulgated on August 5, 2013 (effective October 2013)
 - Attainment SIPs due April 2015
 - Attainment date October 2018
 - Second round BASED ON MODELING by December 2017 (effective by February 2018)
 - Attainment SIPs due August 2019
 - Attainment date February 2023
 - Third round BASED ON MONITORING by December 2020 (effective by February 2021)
 - Attainment SIPs due August 2022
 - Attainment date February 2026
- Proposed consent decree between U.S. and SC/NRDC could result in additional round of designations for source areas



Lead

Lead NAAQS

- Revised NAAQS in 2008, primary and secondary standard is 0.15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) as a 3-month average concentration of lead in total suspended particles (Pb-TSP)
- 21 nonattainment areas designated in 2010-2011
 - 2 of the 21 areas now have clean data determinations
 - Issued findings of failure to submit attainment SIPs in February 2014 for 3 nonattainment areas
- Current Lead NAAQS Review
 - CASAC's June 4, 2013 letter on our draft Policy Assessment concurs with staff conclusion that it is appropriate to consider retaining current NAAQS, without revision
 - Propose Rulemaking – 2014
 - Final Rulemaking – TBD
- NOI received in June 2014 from Center for Biological Diversity, Center for Environmental Health and Clean Air Council to require EPA to issue findings of failure to submit attainment plans (for 4 more areas) and failure to act on attainment plan submissions (for 6 areas)

Regional Haze

Status of RH Actions

- The initial round of RH SIPs is nearly complete
- Only two actions remain to satisfy the consent decree:
 - Texas (CAIR disapproval and RP)
 - Proposed rule November 26, 2014; Final September 4, 2015
 - Oklahoma (all remaining non-BART elements)
 - Proposed rule November 26, 2014; Final September 4, 2015
- Next round of comprehensive SIPs are due July 31, 2018



Periodic Progress Report

- Due 5 years from submittal of the initial SIP under 308 and in 2013 under 309, and must be in the form of a SIP revision
- VA and DE approved; proposed approvals for SC, IA, and WV
- Due dates from now through 2017 for the rest of the states depending on the SIP submittal date
- EPA is reviewing the 5-year regional haze reports in accordance with the guidance issued in April 2013

Future Planning for Regional Haze

- Further exploring two areas:
 - Evaluating the CAA factors for reasonable progress
 - Setting reasonable progress goals with focus on controllable emissions
- Other issues being considered – no decisions made yet:
 - Progress Report requirement to be a SIP revision
 - Next SIPs due July 31, 2018 – consider delay

QUESTIONS OR COMMENTS